

Work Zone Safety Task Force Meeting
Southwest Region HQ Conference Room, Vancouver, WA
September 23, 2004 at 9:00 a.m.

Welcome

Chris Christopher and Kevin Dayton welcomed the group and explained that Gummada Murthy and Don Nelson would only be attending the Work Zone Safety Task Force meetings if their expertise were required. Since the meetings are rotating from one region to another, we will have a different Washington State Patrol representative at each region. Sergeant Tim Winchell was introduced; he is from Vancouver. Each attendee introduced him or her self to the sergeant.

Next Meeting

The next meeting is scheduled for January 13 in Wenatchee. The meeting will be held at the Area 1 Maintenance Conference Room from 9:00 am to 3:30 pm.

Hardhats – Rex Swartz

Rex, Chris and Kevin met with Dan McMurdie of Washington State Department of Labor and Industries regarding when an employee is required to wear a hardhat instead of a soft cap. This meeting was very productive, and it appears that WSDOT and L & I are basically on the same page when it comes hardhat usage. As a result, the Employee Head Protection Instructional Letter (Number IL4011.05 effective September 23, 2004) was reissued. The only change is the addition of II.B.8, which states employees are required to wear a hardhat working on or around the following: “Any construction site whenever there is a potential exposure to danger of falling objects to persons working or occupying the area.” WSDOT has had no injuries from flying objects in works zones. If an L&I inspectors cites an employee for not wearing a hardhat, yet if they are following the WSDOT ruling, L&I Headquarters needs to be contacted to correct this.

WZSTF Subcommittee Reports

The Work Zone Safety Task Force has three subcommittees reporting to it. They were developed in order to pursue work zone issues and assignments from the task force, usually to do the research and development then offer solutions for consideration back to the task force. Representative from these groups reported the following:

- *Traffic Control Oversight Committee (Chair Rex Swartz)*
This subcommittee is made up of representatives from WSDOT, L&I, technical colleges, cities and counties, as well as employer and employee representatives and flagging instructors. The committee helps develop flagging training curriculum, and approved the new plastic flagger card.
- *Safety Products Group Subcommittee (Chair Marty Weed)*
This subcommittee meets quarterly to look at products. Approved products are added to the Approved Products list, which is dispensed to the regions and is available on the web. Marty Weed talked about various products and their pros and cons.

Navigator Channelizer by Plastic Safety Supply:

This product was approved in 2004. The Navigator is a 42" tall channelizing device that may be used as a replacement to a standard traffic cone. For use on WSDOT contracts this product requires a special provision. For WSDOT

maintenance operations, refer to the Channelization Device Matrix for use requirements.

<http://www.plasticsafety.com/nav.asp>

Omni Glow Light Sticks:

This product was approved in 2003. It is a self-activated light stick device that may be used in emergency or incident response situations where normal roadway flares or other motorist alerting devices would be used. Device when activated will emit light for approximately 2 hours.

http://www.omniglow.com/omniglow/chem_lum.shtml

Turbo Flare:

This product was approved in 2000. It is an electronic road flare that replaces an incendiary flare. May be used in emergency or incident response situations where normal roadway flares or other motorist alerting devices would be used.

Manufacturer states that the device will last for approximately 100 hours of continuous use on a single set of 4 "C" cell batteries.

<http://www.ledlinc.com/safetyproducts/sosturbo/index2.htm>

ATM Removable Rumble Strips:

This product was rejected in 2004. This is a removable tape stripe used on the roadway to alert motorists and draw attention to caution signs or road construction. This product did not perform to a level proficient enough to warrant an approval at this time. It did not provide the attention grabbing vibration we had anticipated to warrant further use at this time.

http://www.trafficmarking.com/removable_rumble_strips.html

Here is the link to the New Products web page where products can be searched for and information on the manufacturer, distributor representative information and WSDOT reviewer are contained.

http://www.wsdot.wa.gov/biz/mats/New_prod/

If anyone has any questions on devices or would like additional information they are welcome to contact Marty

- *Technical Subcommittee (Chair Frank Newboles)*

This subcommittee takes on technical issues from the WZSTF, reviews the issues and comes up with recommendations to bring back to the task force. The majority of this subcommittee's time in recent months has been the updating of the Work Zone Traffic Control Guidelines (M54-44). Revised areas include rules modified by the MUTCD, protective gear standards update, traffic control guidelines, motor cycle signs, pilot car use, the addition of the channelization device matrix, and a new section on short duration work zones. The M54-44 will be published in October as a three hole punch document to be bound at the users discretion. The document is also available on the WSDOT web page. A simplified condensed version may be created later for field use.

Region Welcome

Don Wagner, Regional Administrator of Southwest Region, was able to stop by to say hello and applauded the WZSTF for trying to figure out how to ensure a safer environment under very hazardous conditions and to help workers do the job smarter so there are no fatalities. Don notes there are more fatalities in veterans of 25 years or more

than new employees. He also stressed the use of the legislature and law enforcement officials to make drivers accountable for their actions. .

WZSTF Webpage and “Give ‘Em a Brake Program” – Marty Weed and Lisa Murdock

Marty walked the group through characteristics of the webpage and pointed out the new editions.

Lisa provided a year-to-date summation of the “Give ‘Em a Brake Program.” She explained how the limited budget made it difficult to purchase major broadcast time and how she was working the program with “You’re in the Driver’s Seat” campaign. She showed current giveaways, which include:

- Litterbags
- Temporary Tattoos
- Stickers (reflective and non)
- Work zone activity books for children
- Updated Web site www.wsdot.wa.gov/brake/

Lisa talked about the outreach efforts and played the following:

- Statewide radio ads, which are 10-second spots about work zone safety traffic reports provided by Metro Networks statewide.
- Public Service Announcements “In the Elevator” and “At the Office” are two PSAs made for the department years ago but still have merit. The PSAs are being shown on monitors in D.O.L. agencies for people to watch as they wait in line to get their drivers’ licenses.
- Promotional news clips about work zones from two of the major news stations that covered a staged media event featuring Doug MacDonald in a desk on the highway. The clips also featured actual WSDOT footage of collisions in work zones.

It was suggested that these clips could be on the web, and at fairs around the state. Targeting insurance company newsletters was also suggested as another way to get the word out to drivers about the hazards of work zones.

Lisa said in the future she hoped to have a statewide media event tour and welcomed ideas from the task force.

Lump Sum Traffic Control Specifications – Ron Howard and Larry Eik

Because of statewide inconsistency, overruns, difficult project management and misaligned responsibility, all contracts advertised after August 1, 2004 have changes made in the contracts concerning temporary traffic control in construction work zones. This emphasis will require well thought out design, a high quality project specific plan, and independent traffic office review. The plans must conform to the MUTCD and preserve NCHRP 350 crash standards. The benefits expected will be faster project management, contractor control of work, reduced arguments, easier control of “paddle time”, and long-term savings through added efficiencies. The risks to this type of traffic control could be less traffic control, the temptation to cut corners, less control by the state, and possible increased hazard. If the new specifications become detrimental, they will be rewritten.

Total Lane Closures – Don Owings

When working on several projects, including the I5 Bridge, Hwy 500 and Hwy 205, Southwest Region discovered total lane closures reduced one 10-week project to 4 weeks

with two weekend closures, and cut costs by one third. Lane closures allow for several tasks to be performed at the same time including maintenance. Don pointed out that public involvement is crucial to a successful closure; advertisement should begin about nine months in advance. Public input suggests that people are tolerant of road closures if they know how long it will be closed and what is going on, and that a weekend closure is preferable to a few weeks of work. Involving the Washington State Patrol is invaluable. Variable message signs (VMS) are a great help. Credibility is tied up in staying within the criteria set up, it is better to over estimate the amount of time that the work will take rather than giving the public a completion date and not meeting that. Total lane closures are not viable for all projects – traffic volumes, detours, and what will be accomplished are key components to the decision.

Variable Speed Zone Policy – Frank Newboles and Toby Rickman

There is a need to have a better defined policy to reduce regulatory speed limits in work zones and there have been questions as to the requirements to post on site and put notice of speed reduction in newspapers three days in advance of change. The posting regulations are part of the 1986 law and cannot be changed, but a regional administrator can lower speed limits. Discussion ensued as to procedures to use in reducing speed limits on a project, including setting up a safe speed as part of a work zone during working hours only. This is more effective than lowering a speed limit for the life of the project which is difficult to enforce without constant state patrol backup.

Worker Safety During Paving Operations – Phil Fordyce

Construction offices and local agencies are not consistent in using work zone guidelines. In 1997 an instructional letter was sent out regarding WSP traffic control assistance in work zones, which included a set of guidelines for WSP use. This letter was sent out as specific direction to our project offices. A new instructional letter IL4066.00 effective September 10, 2004 provides users of the WSDOT Construction Manual with new rules in work zone traffic control. The group discussed the proper use of WSP in work zones and the concern of funding for troopers. Ralph Robertson circulated a handout, which includes Eastern Region guidelines for use of VMS and spotters during a paving operation.

Region Round Table

Lakeside Industries – Mike O’Neil said that they have a formalized reporting policy of all accidents and near misses. He talked about pre project inspections where they look at pre existing conditions for the protection of workers.

Northwest Region – Phil Fordyce explained that they used continuous closures of lanes being paved instead of nighttime paving in the Mt. Baker area of Hwy 20 and received fewer complaints from the public. Phil talked about design build contracts and the group discussed at length work zone safety and work zone control in design build contracts. Near misses include an accident on I5 near Lynnwood/Everett area when a car in a work zone hit a barrier protected by an attenuator; the car ran up the barrier and flipped over. **A committee of Frank Newboles, Kevin Dayton, and Chris Christopher will meet with the Design Office to discuss stationary attenuators and bring the facts back to the WZSTF.**

Federal Highway Administration – Paul Harker talked briefly about the Supplemental Notice of Proposed Rule Making on work zones, the final rule is effective 2007, FHWA is working with AASHTO on how to implement this rule. There will be a full discussion at the January WZSTF meeting.

North Central Region – Kirk Berg talked about two major types of accidents: hitting deer and backing over things when in a hurry between projects. He expressed concern that work zone and traffic control sub contractors are either not interested in traffic control or over use traffic control. A safety issue their region has implemented – centerline and shoulder stripes on two lane highways are striped on new pavement by the end of each week. North Central believes that when variable speed zones are used appropriately, they work well. In regard to short duration work zones, Kirk feels that when possible, the traveling public should be disrupted as little as possible (i.e. don't close a mile of road to replace one mile post).

Eastern Region – Ralph Robertson talked about the improvements made in specific traffic control plans. He explained that Ted Trepanier's office reviews all traffic control on all jobs in their region. Evidently all regions do this, discussion ensued as to including maintenance in the review. Ralph believes that spotters should be eliminated for safety whenever possible and alternatives be found that don't include putting one more person "in harm's way."

Wilder Construction – Kathleen Salamon said Wilder Construction has recently added a process to review and distribute information related to near misses throughout their company. In regard to the hard-hat issue, Kathleen explained that on two different occasions workers in closed lanes were hit by debris that motorists kicked up. One worker was hit in the eye and may have permanent vision loss; the other worker was hit in the chest but suffered no long-term injury. Kathleen asked the question, would WSDOT be receptive to adding a safety bonus to a contract?

South Central Region – Tom Root talked about a recent accident concerning a striping operation on Hwy 97 where the buffer vehicle was hit. Tom feels the WZSTF should recommend that sheeting materials for paddles be upgraded, currently the paddles blend in with the other signs and vests and are not easily visible. The group talked about other ways to make the flaggers more visible including highlighting a flagging station and lights on paddles.

Rick Gifford talked to the group about SMART Zone, a mobile piece of equipment that contains a VMS, camera, and radar detector. It costs about \$450 a month (TEF charge) to use (it can use either cell or land line). It has been used at the Rye Grass truck climbing lane project; the VMS message can be changed by calls from field personnel to the TMC. It's a good tool to inform the traveling public where there is no permanent VMS.

Olympic Region – Steve Roark talked about repair work that needs to be done on southbound I5 – and the attention they are paying to closing SR16, SR7 and 705 ramps. HAR, VMS and the press are involved in getting advance messages out to the public. Olympic Region is also working on a "next day lag" so that a work zone doesn't stretch out for miles while paving. He talked about accidents that have occurred in work zones including two motorcycle accidents, and a SUV losing control and hitting a truck.

Washington State Patrol – Sergeant Winchell said that being co located with Vancouver has been an invaluable aid in communication with WSDOT; he especially likes being able to rely on the TMC to assist with Incident Response.

Southwest Region – Amy Revis talked about near misses in their region, in one instance there had been VMS warnings days before and signs up and a car still raced through a work zone almost hitting a flagger on a bridge. A road rage incident ended with a flagger threatened with death and WSP tracking down the driver. Amy believes that for the most part, advance warning of a work zone reduces public frustration and she believes advance warning should be included in each contract. She also talked about the importance of each flagging station having a planned escape route; this is an especially important consideration for flagging stations on or near bridges. This also demonstrates the need to have flagger stations integrated into the TCP's.

RC Flagger – Sue Babic and Kathy Hatcher

Sue and Kathy demonstrated how the RC Flagman device works – a cross arm comes down across a lane on a red signal. It's a solar powered device operated with remote control by a person who can also serve as a back up flagger. This product shows the most promise of similar devices looked at. Other states have used this device and been granted interim approval by the FHWA to use it. The RC Flagman is only for use for one-way direction of traffic on a two-lane road. Driver feedback suggests the device is more visible than just a flagger. Sue Babic's crew has critiqued the product and discovered there is less driver anger directed at the device than at a flagger.

Short Duration Work Zone – Frank Newboles

The Work Zone Traffic Control Guidelines (M54-44) will provide more specific direction based on the MUTCD for short duration work zones. This topic will be discussed in more detail at the January WZSTF meeting.

Department of Licensing Drivers Guide

The Department of Licensing did not respond to Secretary Doug MacDonald's letter asking for more WSDOT information to be put into their guide. The newest guide has been printed and distributed so if we want information in the guide we will be looking at the next annual printing. Kevin Dayton asked the group whether we should just forget about getting information into the guide, print an additional brochure, or pursue getting information into the guide. The group agreed that so much work has gone into the guide so far, and that any additional information printed outside the guide may not have much clout, so they voted that **WSDOT will continue to pursue getting work zone information into the DOL guide. Kevin Dayton and Toby Rickman will work this issue.**

Headlights on in Work Zones – Frank Newboles

Pennsylvania Department of Transportation requires drivers to turn on headlights in work zones. This applies to all work zones including cities, counties and utilities. Penn DOT opposed this legislation, but the legislature passed it as law. These "lights on" signs must be set up every day along with other required signs along with flashing strobe lights. After the headlights on in work zone law was passed, work zone fatalities went up 68% (a fact but probably coincidental), and only one in eight drivers complies with the lights on law. The auto industry has challenged this law (they feel daytime running lights are adequate) and the Pennsylvania state police don't like to enforce the law which only has a \$25 fine. **Frank will reply to Don Griffith with an e-mail that can be forwarded to Representative John Lovick saying there has been no demonstrated benefit to headlights on in work zones.**

The meeting adjourned at 3:35 p.m.

Suggested topics for next agenda:

- Opening remarks will include reviewing the Region Roundtable's purpose
- Review the business objective and goals of the team (based on Secretary MacDonald's business plan for WSDOT)
- Discuss the use of WSP in work zones
- A committee of Frank Newboles, Kevin Dayton, Chris Christopher will meet with the Design Office to discuss crashes and barriers and bring the facts back to the WZSTF.
- VMS replacement cycle (Tom Root)
- Fixed message on back of arrow boards such as "drive safely" or "give 'em a brake" (Tom Root)
- Subcommittee updates if there are any
- Region Roundtable
- Update from Governor's Safety conference
- Statewide work zone review
- NPRM report (Paul Harker)
- Short duration work zones
- New M54-44